

WORKSHEET FOR HAZARDOUS WASTE  
SITE RANKING MODEL

FIT QUALITY ASSURANCE TEAM

DRAFT-SUBJECT 1  
CHANGE

153453

GENERAL

Site name and location: Cahokia/Dead Creek  
St. Clair County : Sauget, IL.

Date(s) of site scoring: 3/22/85

Primary source(s) of information (e.g., EPA region, state, FIT, etc.):

- IEPA file - Cahokia/Dead Creek General file.

- IEPA Report: "A Preliminary Hydrogeologic Investigation in  
the Northern Portion of Dead Creek & Vicinity" Ron St. John (4/81)

Factors not scored (assigned 0 for additive and 1 for multiplicative)  
due to insufficient information:

Comments or qualifications:

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## GROUND WATER PATHWAY

### 1 Measured Level or Evidence of Release

Describe substance(s) and nature of release:

Corresponds to  
general waste  
characteristics  
of area  
industries

— PCB's, Chloroaniline, Dichlorobenzene, Copper, Manganese, Lead, Cyclohexane, Chlorophenol, aliphatic hydrocarbons, silver, nickel, arsenic, cadmium — found in monitoring wells by IEPA.

Describe method of measurement or observation:

Lab analysis in report "A Preliminary Hydrogeologic Investigation in the Northern Portion of Dead Creek & Vicinity" by Ron St. John - 4/81 (pp. )

Attachment A

### 2 Depth to Aquifer of Concern

Describe/name aquifer of concern:

N/A - observed release (O.R.)

Why is above aquifer of concern?

N/A - O.R.

Depth and how determined, including sources:

N/A - O.R.

### Net Precipitation

Net precipitation and how determined, including source(s):

N/A - O.R.

### Permeability of Unsaturated Zone

Soil type(s) in unsaturated zone:

N/A - O.R.

Permeability and how determined, including source(s):

N/A - O.R.

[3] Containment

Method of waste management (e.g., surface impoundment, landfill, etc) of extreme case:

N/A - O.R.

Describe basis for selecting extreme case:

N/A - O.R.

Describe method(s) of waste or leachate containment for above extreme case:

N/A - O.R.

Cite source(s) of information:

N/A - O.R.

[6] Physical State

Physical state of waste and source of information:

Liquid - Ron St. John report

Persistence

Most persistent compound subject to transport via ground water:

PCB's

Basis for selecting compound, including source(s):

Lab Analyses from H<sub>2</sub>O & soil samples taken in the area of concern.

Basis for selecting persistence rating score:

Metre persistence

Toxicity/Infectiousness

Toxic materials subject to transport via ground water and Sax or NFPA level for each:

PCB → Sax toxicity

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Cite source(s) of information indicating toxics present on site:

Ron St. John Report

Infectious materials present on site and source(s) of information:

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Basis for selecting CDC classification of infectious materials:

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[7] Total Waste Quantity

Total waste quantity present, including unit of measurement (e.g., tons, cubic yards drums):

> 1,064 cubic yards → IEPA documentation **Attachment B**

Basis for estimating or computing quantity, including source(s) of information:

[8] Ground Water Use

Use(s) of aquifer of concern and source(s) of information:

- industrial use only : ISWS
- municipal water taken from Mississippi upstream in area of Granite City

Distance to Nearest Well Downgradient

Distance to nearest well downgradient:

- Monsanto (Raney) well causes cone of depression

How was downgradient direction(s) established, including source(s) of information:

- ISWS → West South West

How was distance determined?:

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Is nearest building known to be using ground water? Source of information: **No**

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Is nearest well known to be drawing from aquifer of concern? Source of information: *Yes - ISWS, Henry Formation is major aquifer of American Bottoms.*

## Population Served by Ground Water Within 3-Mile Radius

Population served with 3-mile radius: *N/A, no use for drinking water*

How was population counted or computed, including source(s) of information:           

Is population known to be served by aquifer of concern? Source of information:

SURFACE WATER PATHWAY

1 Measured Level or Evidence of Release

Describe substances and nature of release: Contaminants deposited directly in creek. Lab analysis of water samples (soil samples) in creek, pond, and \* Cerro Copper ponds.

Describe method of measurement or observation:

Ron St. Johns report (4/81) Attachment C

2 Site Slope and Terrain

Computation of slope and description of points of measurement:

N/A - O.R.

Cite source(s) of information (topo maps, etc.):

N/A - O.R.

1-Year 24-Hour Rainfall

Amount of rainfall and source of information:

N/A - O.R.

Distance to Surface Water

Distance and description of points of measurement:

N/A - O.R.

Cite source(s) of information:

N/A - O.R.

Flood Potential

In what flood plain, if any, is the site located?:

N/A - O.R.

Cite source(s) of information:

N/A - O.R.

3 Containment

Describe basis for selecting extreme waste management case:

N/A - O.R.

Describe method(s) of waste or leachate containment for extreme case:

N/A - O.R.

Cite source(s) of information:

N/A - O.R.

8 Surface Water Use

Use(s) of downstream surface water and sources of information:

Creek flows through residential areas. Direct contact possible; particularly by children

Critical Habitats

Location and description of downstream critical habitat, if any:

N/A

Distance and description of points of measurement:

N/A

Cite source(s) of information:

N/A

Population Served By Surface Water with Water Intake Within 3 Miles Downstream from Site

Population served by water intake(s): N/A

Is surface water within 3 miles in a tidal estuary?: No

WATER-SUPPLY TO  
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Description(s) and location(s) of intake(s) and corresponding  
population served by each:

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How was population counted or computed?:

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Cite source(s) of water-intake and population information:

ISWS



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## AIR PATHWAY

### 1 Evidence of Release

Describe contaminant and monitoring which reveal that background levels have been exceeded?:

- Organic vapors (uncharacterized) detected in creekbed

Cite source(s) of information:

- April 14, 1982 monitoring Attachment D

- Creek now has standing water; additional (current) sampling

### 3 Physical State/Volatility not possible.

Physical state of waste and source(s) of information:

- Liquid in creek bed (residue)

Vapor pressure of waste and source(s) of information:

N/A - O.R.

### Reactivity

Reactive substances and source(s) of information:

N/A - O.R.

NFPA level for each and basis of selection:

N/A - O.R.

### Incompatibility

Incompatible substances which are present and source(s) of information:

N/A - O.R.

Basis for selecting incompatibility score:

N/A - O.R.

[5] Distance to Nearest Population

Distance and description of points of measurement:

N/A - O.R.

Cite source(s) of information:

N/A - O.R.

Population Within 1-Mile Radius

Population and how counted or computed:

>10,000 : Towns of Cahokia, Centreville, and  
Sauget w/in 1-mile radius

Cite source(s) of information:

Topo. map and census info.

Land Use

Location and type of determining land use:

- Agricultural } All in general vicinity of creek.  
- Industrial }  
- Residential }

Distance to determining land use:

- Adjacent -

Cite source(s) of information:

IEPA files